

Inventors

Angell 10/023,317

11/16/2004

L6 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:12528 HCAPLUS

DOCUMENT NUMBER: 134:91177

ENTRY DATE: Entered STN: 05 Jan 2001

TITLE: ~~Combinations~~ for introducing nucleic acids  
into cells for gene therapy

INVENTOR(S): Plank, Christian; Stemberger, Axel  
; Scherer, Franz

PATENT ASSIGNEE(S): Germany

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

INT. PATENT CLASSIF.

MAIN: C08G065-329

SECONDARY: C08G065-333; A61K048-00; C12N015-87; A61K047-48

CLASSIFICATION: 63-7 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001000708	A1	20010104	WO 2000-EP5778	20000621
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1063254	A1	20001227	EP 1999-112260	19990625
R:	AT, BE, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
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CA 2377207	AA	20010104	CA 2000-2377207	20000621
EP 1198489	A1	20020424	EP 2000-936907	20000621
EP 1198489	B1	20040428		
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JP 2003503370	T2	20030128	JP 2001-506715	20000621
AT 265488	E	20040515	AT 2000-936907	20000621
US 2003026840	A1	20030206	US 2001-23317	20011217
PRIORITY APPLN. INFO.:			EP 1999-112260	A 19990625
			DE 1999-19956502	A 19991124
			WO 2000-EP5778	W 20000621

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001000708	ICM	C08G065-329
	ICS	C08G065-333; A61K048-00; C12N015-87; A61K047-48
EP 1063254	ECLA	A61K047/48W6B; A61K048/00; C08G065/329; C08G065/333; C08G065/333U; C12N015/87
DE 19956502	ECLA	A61K048/00; C08G065/329; C08G065/333U; C12N015/87
US 2003026840	ECLA	A61K047/48W6B; A61K048/00; C08G065/329; C08G065/333;

C08G065/333U; C12N015/87

## ABSTRACT:

The invention relates to combinations of a carrier and a complex, which consists of a nucleic-acid mol. and a copolymer to be used as drug delivery system in gene therapy. Said copolymer consists of an amphiphilic polymer, preferably polyethylene glycol and a charged effector mol., in particular, a peptide or peptide derivative. The invention also relates to the use of the combinations for transferring nucleic acid mols. into cells. The carrier is non-biodegradable or biodegradable, e.g. collagen. Copolymer-protected gene vectors were used to transfect cells and also applied as implants.

SUPPL. TERM: gene therapy drug delivery DNA copolymer complex  
 INDEX TERM: Decomposition  
 (biodegrdn.; combinations for introducing nucleic acids  
 into cells for gene therapy)  
 INDEX TERM: Animal tissue culture  
 Drug delivery systems  
 Drug delivery systems  
 Erythrocyte  
 Gene therapy  
 Microscopy  
 Transformation, genetic  
 Zeta potential  
 (combinations for introducing nucleic acids into cells  
 for gene therapy)  
 INDEX TERM: Collagens, biological studies  
 Lipids, biological studies  
 ROLE: BPR (Biological process); BSU (Biological study,  
 unclassified); THU (Therapeutic use); BIOL (Biological  
 study); PROC (Process); USES (Uses)  
 (combinations for introducing nucleic acids into cells  
 for gene therapy)  
 INDEX TERM: DNA  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
 (combinations for introducing nucleic acids into cells  
 for gene therapy)  
 INDEX TERM: DNA  
 ROLE: BPR (Biological process); BSU (Biological study,  
 unclassified); PRP (Properties); SPN (Synthetic  
 preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); PROC (Process); USES (Uses)  
 (complex with copolymers; combinations for introducing  
 nucleic acids into cells for gene therapy)  
 INDEX TERM: DNA  
 ROLE: BPR (Biological process); BSU (Biological study,  
 unclassified); PRP (Properties); SPN (Synthetic  
 preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); PROC (Process); USES (Uses)  
 (complexes, with copolymers; combinations for introducing  
 nucleic acids into cells for gene therapy)  
 INDEX TERM: Polyoxyalkylenes, reactions  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
 (derivs.; combinations for introducing nucleic acids into  
 cells for gene therapy)  
 INDEX TERM: Drug delivery systems  
 (implants; combinations for introducing nucleic acids  
 into cells for gene therapy)

INDEX TERM: Drug delivery systems  
(injections; combinations for introducing nucleic acids  
into cells for gene therapy)

INDEX TERM: 60-32-2 107-96-0, 3-Mercaptopropionic acid 2127-03-9  
16874-06-9, L-Glutamic acid di-tert-butylester  
25322-68-3D, Polyethylene glycol, derivs. 185462-59-3  
316381-66-5 316381-67-6 316381-68-7  
ROLE: RCT (Reactant); RACT (Reactant or reagent)  
(combinations for introducing nucleic acids into cells  
for gene therapy)

INDEX TERM: 68617-64-1P 185462-59-3DP, conjugate with copolymer via  
disulfide bond 296787-33-2P 316381-65-4P 316381-69-8P  
316381-71-2P  
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)  
(combinations for introducing nucleic acids into cells  
for gene therapy)

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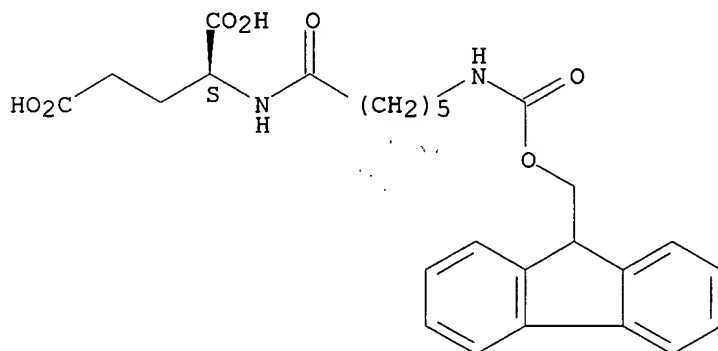
REFERENCE(S): (1) Anon; PATENT ABSTRACTS OF JAPAN 1998, V1998(06)  
(2) Davis, S; WO 9725067 A 1997 HCAPLUS  
(3) Hisamitsu Pharmaceut Co Inc; JP 10028583 A 1998 HCAPLUS  
(4) Schacht, E; WO 9819710 A 1998 HCAPLUS  
(5) Sterling Winthrop Inc; WO 9409056 A 1994 HCAPLUS  
(6) Viagene Inc; WO 9621036 A 1996 HCAPLUS  
(7) Zalipsky, S; US 5455027 A 1995 HCAPLUS

L7 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 316381-71-2 REGISTRY  
 CN L-Glutamic acid, N-[6-[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxohexyl]-, polymer with (2S)-N,N'-bis(2-hydroxyethyl)-2-[[[1-oxo-3-(2-pyridinyldithio)propyl]amino]pentanediamide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Pentanediamide, N,N'-bis(2-hydroxyethyl)-2-[[[1-oxo-3-(2-pyridinyldithio)propyl]amino]-, (2S)-, polymer with N-[6-[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxohexyl]-L-glutamic acid (9CI)  
 FS STEREOSEARCH  
 MF (C26 H30 N2 O7 . C17 H26 N4 O5 S2)x  
 CI PMS  
 PCT Polyamide, Polyamide formed, Polyester, Polyester formed  
 SR CA  
 LC STN Files: CA, CAPLUS  
 DT.CA CAPLUS document type: Patent  
 RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

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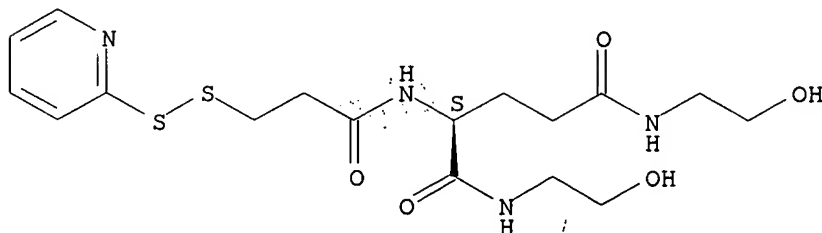
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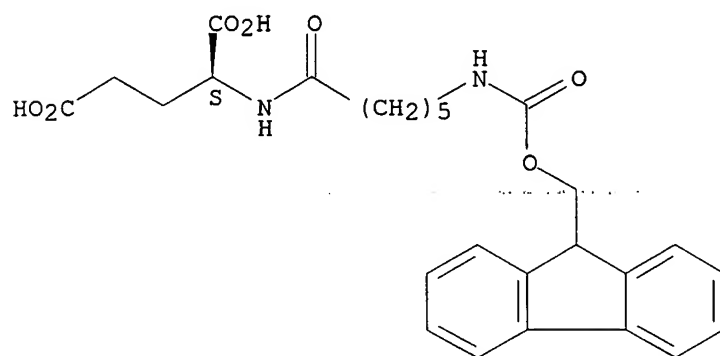
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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RN 316381-69-8 REGISTRY  
CN L-Glutamic acid, N-[6-[[ (9H-fluoren-9-ylmethoxy) carbonyl] amino]-1-oxohexyl]- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H30 N2 O7  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



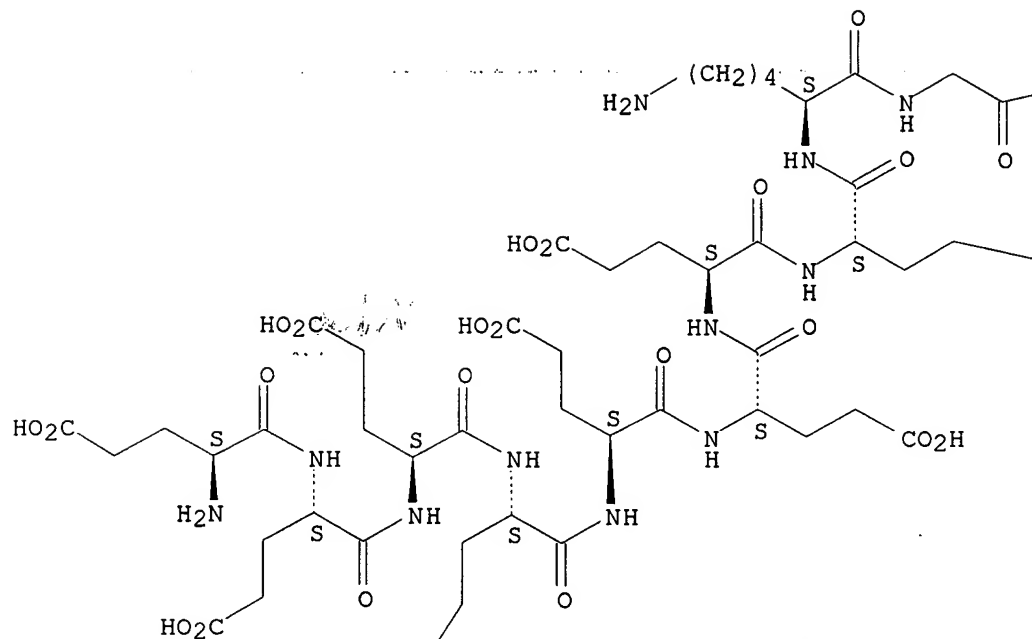
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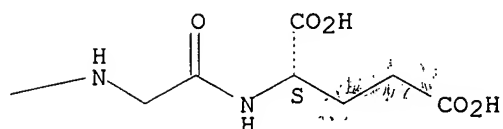
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RN 316381-68-7 REGISTRY  
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FS PROTEIN SEQUENCE; STEREOSEARCH  
MF C55 H83 N13 O31  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: RACT (Reactant or reagent)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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PAGE 2-A



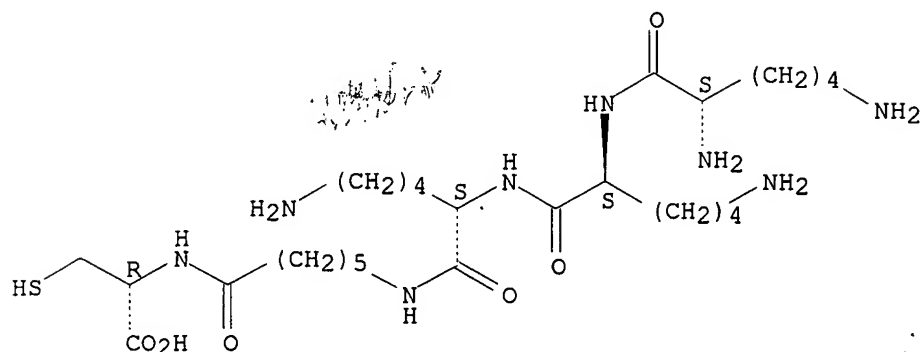
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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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 NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH

MF C27 H54 N8 O6 S  
 SR CA  
 LC STN Files: CA, CAPLUS  
 DT.CA Caplus document type: Patent  
 RL.P Roles from patents: RACT (Reactant or reagent)

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.

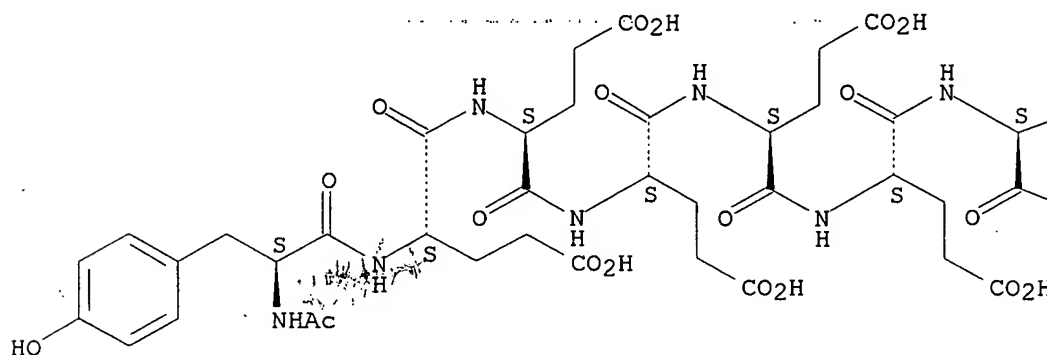


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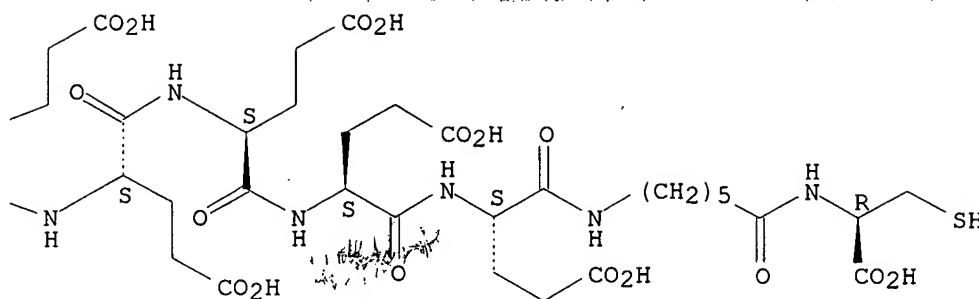
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 RN 316381-66-5 REGISTRY  
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 α-glutamyl-L-α-glutamyl-L-α-glutamyl-L-α-glutamyl-  
 L-α-glutamyl-L-α-glutamyl-L-α-glutamyl-L-α-  
 glutamyl-6-aminoheptanoyl- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE, STEREOSEARCH  
 MF C70 H99 N13 O36 S  
 SR CA  
 LC STN Files: CA, CAPLUS  
 DT.CA Caplus document type: Patent  
 RL.P Roles from patents: RACT (Reactant or reagent)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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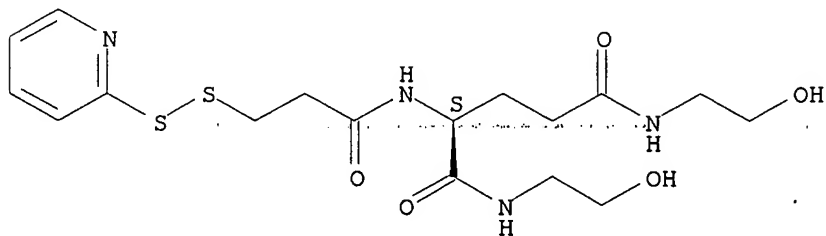
L7 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 316381-65-4 REGISTRY  
CN Pentanediamide, N,N'-bis(2-hydroxyethyl)-2-[[1-oxo-3-(2-pyridinyldithio)propyl]amino]-, (2S)-, homopolymer (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF (C17 H26 N4 O5 S2)x  
CI PMS  
PCT Polyamide, Polyether, Polyether formed  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA CAplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

CM 1

CRN 316381-64-3

CMF C17 H26 N4 O5 S2

Absolute stereochemistry.

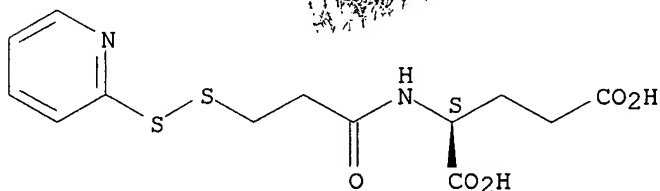


1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 296787-33-2 REGISTRY  
CN L-Glutamic acid, N-[1-oxo-3-(2-pyridinyldithio)propyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH  
 MF C13 H16 N2 O5 S2  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 DT.CA Caplus document type: Journal; Patent  
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 RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



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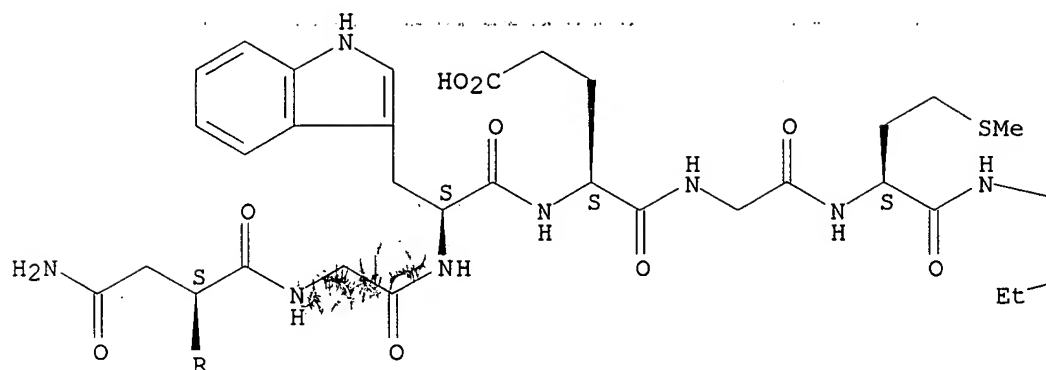
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OTHER NAMES:

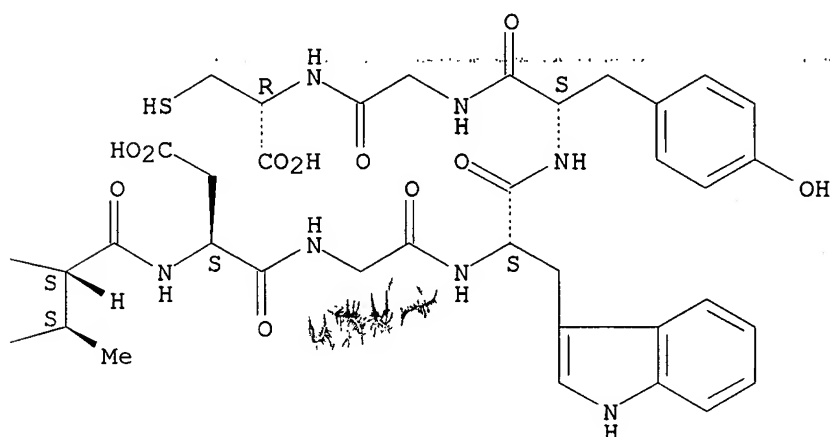
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 RL.P Roles from patents: PRP (Properties); RACT (Reactant or reagent)  
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Absolute stereochemistry.

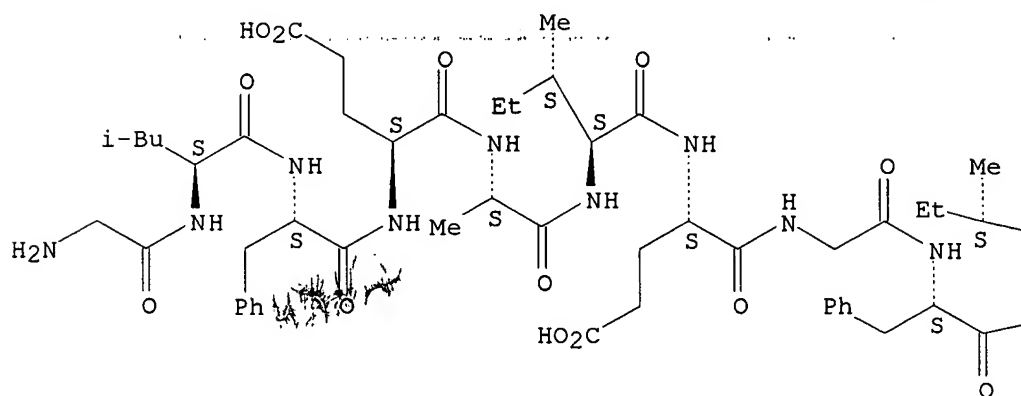
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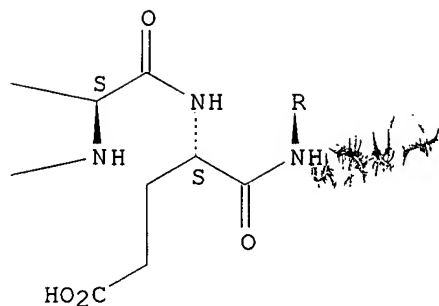
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PAGE 2-A

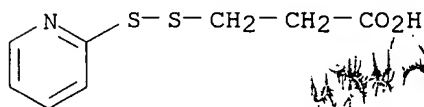


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7 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 9 OF 14 'REGISTRY' COPYRIGHT 2004 ACS on STN  
 RN 68617-64-1 REGISTRY  
 CN Propanoic acid, 3-(2-pyridinyldithio)- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 2-Carboxyethyl 2-pyridyl disulfide  
 CN 3-(2-Pyridinyldithio)propanoic acid  
 CN 3-(2-Pyridyldithio)propionic acid  
 FS 3D CONCORD  
 MF C8 H9 N O2 S2  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, IFICDB, IFIPAT, IFIUDB,  
 TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA Caplus document type: Journal; Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC  
 (Process); RACT (Reactant or reagent)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
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 reagent); USES (Uses)  
 RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);  
 PROC (Process); PRP (Properties); RACT (Reactant or reagent)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
 study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or  
 reagent); USES (Uses)



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70 REFERENCES IN FILE CA (1907 TO DATE)

20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

70 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN

RN 25322-68-3 REGISTRY

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN  $\alpha,\omega$ -Hydroxypoly(ethylene oxide)CN  $\alpha$ -Hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)CN  $\alpha$ -Hydro- $\omega$ -hydroxypoly(oxyethylene)

CN 1,2-Ethanediol, homopolymer

CN 16600

CN 1660S

CN 400DAB8

CN Alkox

CN Alkox E 100

CN Alkox E 130

CN Alkox E 160

CN Alkox E 240

CN Alkox E 30

CN Alkox E 30G

CN Alkox E 45

CN Alkox E 60

CN Alkox E 75

CN Alkox R 100

CN Alkox R 1000

CN Alkox R 15

CN Alkox R 150

CN Alkox R 400

CN Alkox SR

CN Antarox E 4000

CN Aquacide III

CN Aquaaffin

CN Badimol

CN BDH 301

CN Bradsyn PEG

CN Breox 2000

CN Breox 20M

CN Breox 4000

CN Breox 550

CN Breox PEG 300

CN CAFO 154

CN Carbowax

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CN Carbowax 3350  
CN Carbowax 400

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MF (C2 H4 O)n H2 O

CI PMS, COM

PCT Polyether

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS,  
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CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*,  
DIOGENES, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2,  
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USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

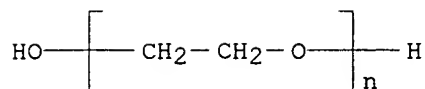
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Preprint; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC  
(Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);  
PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role  
in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC  
(Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);  
PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role  
in record)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);  
MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
(Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
NORL (No role in record)

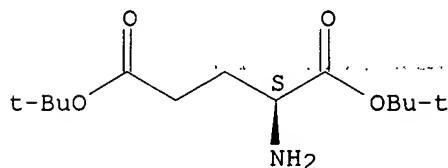
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
study); BIOL (Biological study); CMBI (Combinatorial study); FORM  
(Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence);  
PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
reagent); USES (Uses)



79260 REFERENCES IN FILE CA (1907 TO DATE)  
 21504 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 79439 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 16874-06-9 REGISTRY  
 CN L-Glutamic acid, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glutamic acid, di-tert-butyl ester (6CI)  
 CN Glutamic acid, di-tert-butyl ester, L- (7CI, 8CI)  
 OTHER NAMES:  
 CN  $\alpha,\gamma$ -Di-tert-butyl L-glutamate  
 CN Di-tert-butyl glutamate  
 CN Di-tert-butyl L-glutamate  
 CN L-Glutamic acid di-tert-butyl ester  
 FS STEREOSEARCH  
 MF C13 H25 N O4  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSChem, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Caplus document type: Conference; Journal; Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)  
 RL.NP Roles from non-patents: BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)

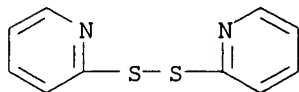
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

102 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 102 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L7 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 2127-03-9 REGISTRY  
 CN Pyridine, 2,2'-dithiobis- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Pyridine, 2,2'-dithiodi- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 2,2'-Dipyridinyl disulfide  
 CN 2,2'-Dipyridyl disulfide  
 CN 2,2'-Dithiobis(pyridine)  
 CN 2,2'-Dithiodipyridine  
 CN 2-Aldrithiol  
 CN 2-Pyridyl disulfide  
 CN Aldrithiol 2  
 CN Bis(2-pyridinyl) disulfide  
 CN Bis(2-pyridyl) disulfide  
 CN Di-2-pyridyl disulfide  
 CN NSC 677438  
 CN NSC 94055  
 FS 3D CONCORD  
 DR 219143-69-8  
 MF C10 H8 N2 S2  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CSCHM, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB,  
 IPA, MEDLINE, NIOSHTIC, PROMT, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2,  
 USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Caplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses); NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP  
 (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
 study); BIOL (Biological study); PREP (Preparation); PRP (Properties);  
 RACT (Reactant or reagent); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1010 REFERENCES IN FILE CA (1907 TO DATE)  
 27 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1012 REFERENCES IN FILE CAPLUS (1907 TO DATE)

## 8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L7 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 107-96-0 REGISTRY  
CN Propanoic acid, 3-mercapto- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Propionic acid,  $\beta$ -mercapto- (4CI)  
CN Propionic acid, 3-mercapto- (8CI)  
OTHER NAMES:  
CN  $\beta$ -Mercaptopropanoic acid  
CN  $\beta$ -Mercaptopropionic acid  
CN  $\beta$ -Thiopropionic acid  
CN 2-Mercaptoethanecarboxylic acid  
CN 3-Mercaptopropanoic acid  
CN 3-Mercaptopropionic acid  
CN 3-Thiopropionic acid  
CN 3-Thiopropionic acid  
CN Mercaptopropionic acid  
CN MPA  
CN NSC 437  
CN NSC 45157  
CN Thiohydracrylic acid  
FS 3D CONCORD  
MF C3 H6 O2 S  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHM, DDFU, DETHERM\*, DIPPR\*, DRUGU,  
EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,  
MSDS-OHS, NIOSHTIC, PIRA, PROMT, PS, RTECS\*, SPECINFO, TOXCENTER,  
ULIDAT, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)  
DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report  
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
(Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
NORL (No role in record)  
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP  
(Properties); RACT (Reactant or reagent); USES (Uses)  
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);  
MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
(Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
NORL (No role in record)  
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP  
(Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
reagent); USES (Uses)

HS-CH<sub>2</sub>-CH<sub>2</sub>-CO<sub>2</sub>H

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2440 REFERENCES IN FILE CA (1907 TO DATE)  
271 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
2450 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L7 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2004 ACS on STN

RN 60-32-2 REGISTRY

CN Hexanoic acid, 6-amino- (7CI, 8CI, 9CI) (CA INDEX NAME)

## OTHER NAMES:

CN ε-Amino-n-hexanoic acid

CN ε-Aminocaproic acid

CN ε-Aminohexanoic acid

CN ε-Leucine

CN ε-Norleucine

CN ω-Aminocaproic acid

CN ω-Aminohexanoic acid

CN 177 J.D.

CN 6-Amino-n-hexanoic acid

CN 6-Aminocaproic acid

CN 6-Aminohexanoic acid

CN Acepramin

CN Acepramine

CN ACS

CN Afibrin

CN Amicar

CN Amikar

CN Aminokapron

CN Caplamin

CN Capramol

CN Caprocid

CN Caprolisin

CN CL 10304

CN CY 116

CN EACA

CN EACS

CN Epsamon

CN Epsicapron

CN Epsikapron

CN Epsilcapramin

CN Epsilon S

CN Hemocaprol

CN Hemopar

CN Hepin

CN Ipsilon

CN NSC 212532

CN NSC 26154

CN NSC 400230

CN Respramin

FS 3D CONCORD

DR 93208-38-9, 87867-96-7

MF C6 H13 N O2

CI COM

LC STN Files: ANABSTR, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHM, DDFU, DETHERM\*, DIOGENES, DRUGU,

EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDb, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, RIRA, PROMT, PS, RTECS\*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report  
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>5</sub>-CO<sub>2</sub>H

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4190 REFERENCES IN FILE CA (1907 TO DATE)  
284 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
4192 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)